

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005572**Date Inspected:** 28-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Shen Fuyou**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG segments**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG assembly bay 14

This QA observed ZPMC qualified welding personnel identified as Miss Gao Min (050988) and Mr. Tang Xinjian (066041) perform FCAW welding on deck panel U-rib to diaphragm joints. The deck panel was identified as DP-583. ZPMC QC identified as Mr. Wu Bin was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

This QA observed ZPMC qualified welding personnel identified as Mr. Hu Luncai (066897) perform FCAW welding on deck panel U-rib to diaphragm joints. The deck panel is identified as DP-588. ZPMC QC identified as Mr. Wu Bin was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

This QA noted that ZPMC personnel are in the process of fitting and tack welding a floor beam on OBG segment identified as 6AE at PP045.

This QA received ZPMC Non Destructive Testing (NDT) notification No. 002106 to perform Ultrasonic Testing (UT) of approximately 10% of the welds previously tested by ZPMC Quality Control (QC) personnel. This QA noted that ZPMC QC UT technicians have rejected the welds shown on the notification. The weld

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designations are as follows:

SEG033A-007 and SEG033A-004.

NOTE: SEG033A-004 was not mentioned on this notification. This QA is only noting that UT appears to have been performed on this day and has been rejected by the contractors QC. This QA noted that there appears to be 16 rejectable UT indications on SEG033A-007 and 21 rejectable UT indications on SEG033A-004.

OBG assembly bay 13

This QA observed ZPMC qualified welding personnel identified as Mr. Liu Qingtian (066359) and Mr. Liu Xiaolin (067079) perform FCAW welding on weld joints identified as SSD19A-PP018-107~124. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as Mr. Cao Tao (066163) perform FCAW welding on weld joints identified as SSD20A-PP017-107~124. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as Mr. Li Guihua (062753) perform FCAW welding on weld joints identified as FB059-008-016, 026, 036 and 046. ZPMC QC identified as Mr. Zhang Xian Ji was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA noted that ZPMC has set three deck super panels on top of OBG segment identified as 1BE. It appears as though ZPMC is fitting and tacking one of these panels into position

. OBG outside assembly (segment 4BE)

This QA observed ZPMC qualified welding personnel identified as Mr. Yu Huiye (045143) perform FCAW welding on weld joints identified as SSD17-PP027-221 and 231. ZPMC QC identified as Mr. Zhong Guo Hui was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-Tc-U4c-F.

This QA noted ZPMC personnel fitting and tack welding angle braces on the top side of the side and bottom panel "T" stiffeners.

OBG outside assembly (segment 5BE)

No significant work observed on this segment while QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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